

DATA SHEET

MYLAR POLYESTER FILM

TYPICAL PHYSICAL AND THERMAL PROPERTIES OF MYLAR® POLYESTER FILM

Properties		Typical Value	Units	Test Method
Gauge and Typ		92A		
End Use		Industrial		
Ultimate Tensile Strength	MD	28,000	psi	ASTM D 882
	TD	34,000	psi	ASTM D 882
Strength at 5% Elongation (F-5)	MD	15,000	psi	ASTM D 882
	TD	14,000	psi	ASTM D 882
Modulus	MD	710,000	psi	ASTM D 882
	TD	740,000	psi	ASTM D 882
Elongation	MD	115	%	ASTM D 882
	TD	92%	ASTM D 882	
Surface Roughness Ra		38	nm	Optical Profilometer
Density		1.390	g/cc	ASTM D 1505
Viscosity		0.56	dL/g	ASTM D 4603
Dimensional Stability at 105°C	MD	0.6	%	Du Pont test
	TD	0.3	%	Du Pont test
at 150°C	MD	1.8	%	Du Pont test
	TD	1.0	%	Du Pont test
Specific Heat		0.28	cal/g/°C	
Coefficients of Thermal Expansion		1.7 x 10 ⁻⁵	in./in./°C	ASTM D 696 30°C-50°C
Thermal Conductivity (MYLAR 1000A)		3.7 x 10 ⁻⁴	cal/cm cm ² /sec/°C	25°C-75°C
UL 94 Flame Class		94VTM-2	Slow to self-extinguishing	

GENERAL ELECTRICAL PROPERTIES OF MYLAR® POLYESTER FILM

Properties		Typical Value	Units	Test Method
Dielectric Strength AC, 25 °C, 92 gauge		7,000	volts/mil	ASTM D149-64
Dielectric Constant 25 °C, 1 kHz		3.2	–	ASTM D150-81
Dissipation Factor 25 °C, 1 kHz		0.005	–	ASTM D150-65
Volume Resistivity 25 °C		10 ¹⁸	ohm-cm	ASTM D257-78
Surface Resistivity 23 °C, 30% Relative Humidity		10 ¹⁶	ohm/square	ASTM D257-78
Corona Threshold Voltage, 92 gauge		425	V-AC	ASTM D2275-80



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